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eFinancial Health Synergy and Prevention Science

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Objective Two: eFinancial Health Synergy and Prevention Science: Dr. Nan Taylor – Thinkfinity Cornerstone I Report – Fall, 2013

Prevention Science provides an alternative model for framing, implementing and disseminating financial education and suggests another synergy with health science concerns.

The impact of Prevention Science approaches can be illustrated in the World Health Organization (WHO) decision to approach the problem of violence from a public health and Prevention Science model. WHO (2002) declared that violence should be addressed beyond the crime and punishment framework and studied in terms of its impact on health and wellbeing. WHO defines violence as follows:

> "The intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation." (p. 5).

The result of a public health oriented violence initiative has been far reaching in impact and has stimulated prevention science efforts geared toward collective action.

The question posed by Objective Two of this report goes beyond the concern with "what works?" that was addressed in Objective One. Rather, the aim of Objective Two is to explore whether a prevention science model might enhance the usefulness of financial education. This issue will be explored in three ways:

1. Is financial education a viable tool for prevention with groups deemed at financial risk? Of particular interest are women and the elderly.

2. Are prevention science variables such as risk, risk factors, crisis, protective factors, resilience, wicked problems and conservation of resources relevant to targeting financial education?

3. What are the implications for evaluation when financial education is applied as a prevention strategy?

Problem One: Financial Education as Prevention

Two levels of risk might be considered when one considers financial education as a prevention tool. The first level of risk refers to economic consequences of various health risks. The second level of risk concerns the health implications of the experience of financial risk.

Three programs provide evidence for these two levels of risk: The Gallup-Healthways project, the University of Michigan longitudinal Health and Retirement

Study, and Grameen Bank. The Gallup-Healthways project assesses daily life conditions as an index of wellbeing. The Gallup measure argues for an appreciation of the economic burdens that accompany poor health and the relevance of health to wellbeing. The University of Michigan's Health and Retirement Survey is longitudinal and considers the impact of health and wealth on quality of life during retirement. As such, the Michigan study is targeted to older participants. Grameen Bank is a social enterprise venture focusing especially on women and uses microfinance and financial education as a tool to address the conditions of women living in conditions of poverty.

Since 2008 the Gallup Healthways Well-Being Index has provided a daily assessment of well-being among Americans:

> The Gallup-Healthways Well-Being Index is designed to be the Dow Jones of health, giving a daily measure of people's wellbeing at the close of every day. With a daily measure, determining the correlation between the places where people work and the communities in which they live, and how it impacts their wellbeing, is now possible. Additionally, the index will increase an understanding of how those factors impact the financial health of corporations and communities.
>
> The Gallup-Healthways Well-Being Index, a unique partnership in research and care, began in January 2008, and surveys 1,000 Americans every day. The research and methodology underlying the Well-Being Index is based on the World Health Organization definition of health as "not only the absence of infirmity and disease, but also a state of physical, mental, and social wellbeing."

http://www.gallup.com/poll/106756/galluphealthways-wellbeing-index.aspx

The Gallup Healthways project focuses on health and, like the WHO focus on economic costs of violence, establishes a connection between health and economic outcomes. The insight inherent in these analyses involves identification of the economic costs of compromises to physical health precipitated by violence or disease and infirmity. Of particular interest are factors that impair or diminish productivity at work.

WHO addresses economic issues related to violence as follows:

> "Economic effects were measured at the individual level as direct economic costs and benefits, lost earnings, psychological costs and lost investments in human capital - and at the aggregate level in terms of the effects of interpersonal violence on investment, social cohesion and economic growth."

And,

> …with particular reference to poverty, structural adjustment, income inequality and social investment."

And,

"The economic effects of interventions…" (p. 1, Economic Violence, WHO, 2004).

The WHO and Gallup Healthways analyses urge health care and public health prevention as cost effective tools to prevent adverse economic outcomes. However, both groups are aware that financial factors similarly precipitate and worsen health and wellbeing. Just as poor health and violence carry economic costs, so too economic conditions can operate to provoke both violence and ill health. For example, a recent study by the American Psychological Association (APA) reported the following on its website section dealing with money:

> "With Americans confronting especially challenging economic times, it's not surprising that money tops the list of sources of significant stress in their lives. Even children aren't immune from financial worries. While only 18 percent of parents believe that money is a source of stress for their children, 30 percent of youth say they're worried about their family having enough money." http://www.apa.org/topics/money/index.aspx

Another survey by the APA concluded that money was the most significant stressor that affected adults (APA, 2012). Considered together, it appears warranted to conclude a bidirectional economic impact. That is, health related issues, including violence, are economically costly *and* financial stressors are hazardous to one's health.

The University of Michigan Health and Retirement Study and Grameen Bank demonstrate how a finances first approach can facilitate the transformation of health goals that drive the Gallup Healthways and other health related collective initiatives. For example the Health and Retirement Study documents a wealth-health connection in its sample:

> "An important finding from the HRS is the strong correlation between health and wealth. In 2002, the mean household wealth… of married couples reporting excellent health was approximately three times that of married couples reporting poor health (an average of $500,000) compared with ($164,000) The relative difference among unmarried HRS participants is even more striking, with average household wealth for those reporting excellent health more than five times greater than for those reporting poor health." (p. 69).

In addition, when health events arise, economic circumstances falter:

> "Health status not only is linked to the amount of wealth, but also may be associated with the composition of household wealth portfolios. A study using HRS data for 1992 to 1998 found that poor health decreases the probability of holding certain types of assets, and that people in poor health tend to have relatively "safe" portfolios compared with those of people in good health (Rosen and Wu 2003). For this study, the researchers specified four categories of assets: "safe assets" (money market funds, checking and savings accounts, CDs, U.S. Treasury bills, and Government savings bonds), retirement accounts (IRAs and Keogh plans), bonds (corporate, municipal, foreign, and bond funds), and "risky assets" (stocks and mutual funds). (p. 71).

Health concerns of older members of society are inevitable and even among those who maintain their health and wealth, the onset of age-related health problems affects personal wealth accumulations. As a result, it is possible to address the concerns of retirement more broadly:

> "One pioneering analysis constructed a measure of preciseness in probabilistic answers and related this to the likelihood of holding risky household assets and to the rate of growth of household net worth (Lillard and Willis, 2001), two results emerged: first, there was a wide range in the precision of probabilistic thinking throughout the population, and second, more precise probabilistic thinking led people to be willing to take more risks and to enjoy greater increases in wealth. At first blush, such a finding might be used to justify fears about expanding the scope for choice through IRAs because significant portions of the population will be unable to exploit the benefits of choice. However, the study authors hasten to point out that this is a preliminary finding, and that the next step is to explore the degree to which individuals reduce uncertainty through experience with financial management (and therefore become better able to manage their own affairs to their benefit). (p. 72).

In the case of Grameen Bank, Yunis Muhammad developed a microlending model of social enterprise targeted toward women in poverty. His work began in India and has ultimately developed other forms of global social enterprise ventures. Financial education is a part of his approach:

> "If poverty is to find it's place in a museum, as Prof. Yunus envisions, there are going to have to be institutional changes at the top of the pyramid that work to reduce the inequitable wealth distribution. Yunus is now focused on building social businesses and defining the framework for the movement he hopes will provide market-based solutions to social problems. Grameen is contributing their part by bringing poor people to the table, sharing food for thought, and allowing the impoverished to get the

necessary resources to be active participants in the global marketplace. Many Americans are without life insurance, fail to think about the future, and have no savings or pension. Financial literacy is not a developed vs. undeveloped phenomenon, the global recession affected everyone and I know people that put money under the mattress instead of in a bank account. An increased effort by organizations to educate communities around financial literacy and offer tools that extend beyond a basic loan can empower people to make better choices that contribute to their improved livelihood and a more equitable world for everyone."

https://docs.google.com/document/edit?id=113Oi9QDkxTUYQ0fvkRncgUrjbtVQK_WVmBNeVoTS8I1g&hl=en

More recently, Grameen Bank has worked to develop mobile phone APPS to increase financial literacy.

The Gallup-Healthways initiative, the Health and Retirement Study, and Grameen Bank are three examples that relate financial education to targeted prevention services that decrease the strains of everyday life, aging, and poverty respectively. Clearly, the fit between financial education and health is acted upon if not explicitly articulated and integrated within a Prevention Science Framework.

Problem Two: Financial Risk, Resilience, Crisis, Wicked Problems, and Conservation of Resources (COR)

Critical constructs within a Prevention Science model are risk, resilience, and crisis. Wicked problems refer to conceptualizations of long term and persistent problems that are not amenable to eradication. Conservation of Resources (COR) refers to the study of the impact of aversion to risk and loss. If a financial literacy and education initiative are to be incorporated into a Prevention Science framework then it would be useful to consider how these terms might work.

Risk refers to the likelihood of experiencing an adverse outcome. Clearly, there are individuals who are more likely to experience adverse financial outcomes. Women are at greater risk than men, the disabled at greater risk than the able bodied, youth more at risk than adults, and the elderly and children are at greater risk than other age groups. In the field of Prevention Science, risk is generally approached within a socioecological model that examines levels of risk: individual, relationship, community, and societal. A person is considered at risk when they have risk factors at any of the levels specified by the model. For example, family dysfunction and substance abuse are considered relationship level risk factors that would place a person at risk for some adverse outcome.

Risk models often list poverty as a risk factor at all levels of the model because it can predict adverse outcomes at all levels of the model. This is the special emphasis of Grameen Bank in its targeting of poverty as an outcome with an increased likelihood among those who do not qualify for participation in conventional financial services. Rather than pursue resources through donations for the poor, social enterprise addresses the societal availability of financial services and knowledge.

Resilience refers to the ability to re-engage after an adverse experience. Applied to financial circumstances, resilience would mean the ability to get a new job after a job loss, or to recover stability after a financial loss. The Health and Retirement Study illustrates this in the case of the old and elderly when they address the impact of predictable health changes on savings and investment.

Crisis refers to circumstances that exceed the expected capacities for coping. A crisis is a situation in which those with the best of plans and those with no plans might face comparable outcomes. The financial crisis of 2008 affected the financial resources of people across all levels of the economy. However, the resilience to re-engage after loss varied depending upon one's overall social access and supports.

Wicked problems include any problem that will not go away – even under the best of circumstances. After 2008, the best minds and the best efforts of the twentieth century financial juggernaut of the United States banking system barely put Humpty Dumpty back together again. And awareness of boom-bust cycles and cautions about "irrational exuberance" did not prevent a global financial crisis. Yet financial matters must be faced and managed and encouraged in spite of the seemingly inevitable, unpredictable, and the unforeseen.

Finally, Conservation of Resources (COR) involves the assessment of the impact of actual and threatened loss of resources. The COR model was developed by Hobfoll (2012) who noted the following applications to the study of the military:

> "COR theory is based on the central tenet that individuals "strive to obtain, retain, foster, and protect those things they centrally value" (Hobfoll, 2011, p. 117). These centrally valued entities are termed "resources" and include personal, social, material, and energy resources. COR theory further posits that resource loss is the main cause of the negative sequelae of stressful conditions, including psychological distress, negative health outcomes, and diminished functioning. Although the full basis for loss' primacy is beyond the scope of this paper (see Hobfoll, 1988, 1989, 1998, 2001), its core is found in the evolutionary need to attend especially to losses because they critically challenge survival. In turn, this has led to a primacy of loss in neurological, cognitive, emotional, and behavioral domains. At the same time, it is the preservation of these same resources that are the building blocks of stress resilience. To the extent people possess and retain a strong reservoir of psychosocial and material resources, they are more resistant to resource losses that do occur. According to COR theory, traumatic stress is characterized by a rapid loss of psychosocial and material resources (Hobfoll, 1991) whereas job-related demands often result in a slow drain of resources (Hobfoll & Shirom, 1993). Over time, this means that for military personnel,

> traumatic and job-related stressors will combine to result in a depleted pool of resources that are a cause of these stress outcomes and further undermine people's ability to resist stressful demands because the very resources they would call upon are depleted. These are termed "resource loss spirals" in COR theory. (p. 219-220).

There is evidence that an emphasis on resources is becoming central to understanding capacity building defined in development research circles as follows:

> "The availability of resources and the efficiency and effectiveness with which societies deploy these resources to identify and pursue their development goals on a sustainable basis." (World Bank. org)

Prevention Science frameworks have also embraced the notion of resource and capacity building as evidenced in the in the Applying Science Advancing Programs (ASAP) of the Centers for Disease Control (CDC). If the ASAP goals were applied to financial education and literacy the focus might be as follows:

- How do we achieve the widespread use of effective practices, policies, and programs to prevent financial resource loss?
- What infrastructures or systems are needed to ensure that dissemination and implementation are carried out successfully?
- How do organizations and practitioners build the capacity needed to bring effective financial resource loss prevention strategies to scale community wide? (CDC, ASAP document, CDC.org)

In conclusion, if financial literacy and education were to be placed in a Prevention Science framework, the notions of financial risk, risk factors, resilience, crisis, and capacity would be developed to articulate prevention plans for vulnerable groups. Indeed, recent work in financial education has already indicated that decision making under conditions of risk seem to be highly relevant to effective financial participation (Yao, Hanna, & Lindamood, 2004). In addition, health behavior change models have been identified as relevant ot evaluating financial education outcomes (Xiao, Newman, Prochaska, Leon, Bassett, & Johnson, 2004).

Similarly, if financial affairs were conceptualized as wicked problems, then the issue of "what works" would be reevaluated as well (Kazdin, 2011). We would not expect that small doses of education, or even a steady transfusion of input, would prevent the unevenness of financial events. Rather, the model would anticipate a range of perturbations with a range of adverse outcomes.

Problem Three: Evaluation Implications of Prevention Science Models

The University of Colorado Blueprints Program provides rigorous standards of evaluation in order to earn the status of best practices or "model" programs and promising practices for prevention. The Blueprints website lists 47 promising and model programs. Among these programs, there are 12 family oriented programs, 9 reading literacy and other school oriented programs, 5 drug and alcohol programs, 7 physical and sexual health related programs, 14 emotional and behavioral programs for children and youth. Among these programs are 10 model and 37 promising selections. http://www.blueprintsprograms.com/allPrograms.php

Criteria for inclusion in the model programs list in as follows:

PROMISING PROGRAMS

Promising programs meet the following standards:

- Intervention specificity: The program description clearly identifies the outcome the program is designed to change, the specific risk and/or protective factors targeted to produce this change in outcome, the population for which it is intended, and how the components of the intervention work to produce this change.
- Evaluation quality: The evaluation trials produce valid and reliable findings. This requires a minimum of (a) one high quality randomized control trial or (b) two high quality quasi-experimental evaluations.
- Intervention impact: The preponderance of evidence from the high quality evaluations indicates significant positive change in intended outcomes that can be attributed to the program and there is no evidence of harmful effects.
- Dissemination readiness: The program is currently available for dissemination and has the necessary organizational capability, manuals, training, technical assistance and other support required for implementation with fidelity in communities and public service systems.

MODEL PROGRAMS

Model programs meet these additional standards:

- Evaluation Quality: A minimum of (a) two high quality randomized control trials or (b) one high quality randomized control trial plus one high quality quasi-experimental evaluation.

Positive intervention impact is sustained for a minimum of 12 months after

http://www.blueprintsprograms.com/programCriteria.php

This framework requires a level of evaluation unheard of in the realm of financial literacy. And, it could be that this level of evaluation may not be the only standard to apply. For example, a National Research Symposium (2008) addressed research priorities for financial literacy and education as follows:

> "From a content perspective, there needs to be a better understanding of the purpose of financial education and what financial information or skills need

to be conveyed. Specifically, what are the core areas related to personal finance that all consumers need to understand to maneuver in the marketplace responsibly or to achieve the goals and outcomes determined by financial education?

Research is needed to investigate the effectiveness of various delivery methods for different target populations, the timing of that delivery, and the intensity of the financial education needed to motivate financial change.

There is a need for researchers to focus on the development of more reliable and valid measures of financial education, especially to document long-run behavior change.

Research is needed to better understand if, and how, financial education translates to improvements in knowledge retention, attitudes and motivation, and long-run financial behaviors, while adequately controlling for internal and external threats to the validity of the study.

Research is needed to better understand financial behavior and the decision-making process in general. How do consumers make financial decisions and how can financial education programs best modify and strengthen this process?

More investigation is needed to determine whether financial education may be more effective in conjunction with a combination of other regulatory or policy based tools." (p. 16, National Research Symposium in Financial Education and Literacy).

Grameen Bank establishes different priorities when it establishes metrics for progress in microfinance:

"Every year GB staff evaluate their work and check whether the socio-economic situation of GB members is improving. GB evaluates poverty level of the borrowers using ten indicators. A member is considered to have moved out of poverty if her family fulfills the following criteria:

1. The family lives in a house worth at least Tk. 25,000 (twenty five thousand) or a house with a tin roof, and each member of the family is able to sleep on a bed instead of on the floor.

2. Family members drink pure water of tube-wells, boiled water or water purified by using alum, arsenic-free, purifying tablets or pitcher filters.

3. All children in the family over six years of age are all going to school or finished primary school.

4. Minimum weekly loan installment of the borrower is Tk. 200 or more.

5. Family uses a sanitary latrine.

6. Family members have adequate clothing for every day use, warm clothing for winter, such as shawls, sweaters, blankets, etc, and mosquito-nets to protect themselves from mosquitoes.

7. Family has sources of additional income, such as vegetable garden, fruit-bearing trees, etc, so that they are able to fall back on these sources of income when they need additional money.

8. The borrower maintains an average annual balance of Tk. 5,000 in her savings accounts.

9. Family experiences no difficulty in having three square meals a day throughout the year, i. e. no member of the family goes hungry any time of the year.

10. Family can take care of the health. If any member of the family falls ill, family can afford to take all necessary steps to seek adequate healthcare." http://www.grameen-info.org/index.php?option=com_content&task=view&id=23&Itemid=126

Conclusion

Establishing a Prevention Science framework for financial literacy and education programs suggests another health synergy in that it locates financial literacy and education efforts within a public health model. A major advantage of this strategy is to take advantage of the dissemination and implementation networks made available by the network of resources devoted to prevention and intervention.

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9. Yao, R., Hanna, S. D., & Lindamood, S. (2004). Changes in financial risk tolerance, *Financial Services Review*, *13* (4), 249-266. In addition, health behavior change models have already been identified as relevant to financial education efforts

This document also drew from the websites noted within the content of the document.